

REMARKS

Introduction

Reconsideration and allowance of the subject application are respectfully requested.

Claims 1, 3-5 and 8-14 have been amended at various places by inserting "storage" before "magazine" to clarify that the recitation of "said magazine" was intended to be the same as the recitation of "storage magazine" and thereby overcome the rejection of Claims 1-14 under 35 U.S.C. 112, second paragraph. No new matter has been added.

Claim 1 originally recited a coupling subassembly rotatably mounts a storage magazine, top cover and outer enclosure as a unit for undergoing rotation relative to a top platform and base housing of the vending machine for disposing the selected one of the cavities of the storage magazine over a radial opening in the top platform. Claim 1 has been amended in a minor respect to recite that the rotation of said unit relative to the top platform and base housing is "in response to the outer enclosure being manually rotated by the user". This amendment is introduced into Claim 1 to add clarity by now making explicit what was originally implied in paragraph (e) of Claim 1, that being, that by a user manually rotating the outer enclosure the storage magazine also is rotated so that a selected one of its cavities is placed over the radial opening in the top platform so that the desired items in a small package can be dispensed through the radial opening of the top platform. As will become clear below, Claims 1-14 are believed to be patentable as originally presented and this amendment to Claim 1 was not necessitated because of the citation of the combination of the prior art Probasco and Dyment et al. patents in the rejection of Claim 1.

The indication by the Examiner that Claims 8 and 11-14 contain allowable subject matter is hereby acknowledged. Claim 8 has been amended to incorporate the subject matters of independent base Claim 1 and intervening dependent Claim 6 and so has been rewritten

in independent and allowable form. Claim 11 has been amended to incorporate the subject matter of independent base Claim 1 and so has been rewritten in independent and allowable form along with Claims 12-14 which depend directly or indirectly therefrom. No new matter has been introduced.

For reasons presented hereinafter, Claims 1-14 which remain pending in the application are believed to patentably distinguish the present invention over the cited references.

Examiner's Rejections

The Examiner has made the following rejections based on citation of prior art:

(a) Claims 1 and 2 under 35 U.S.C. 103(a) as being unpatentable over Probasco (US 2,990,084) in view of Dyment et al. (US 4,663,943).

(b) Claim 3 under 35 U.S.C. 103(a) as being unpatentable over Probasco in view of Dyment et al. as applied to Claim 1 above, and further in view of Grubb, Jr. (US 4,258,966).

(c) Claims 4, 5, 9 and 10 under 35 U.S.C. 103(a) as being unpatentable over Probasco in view of Dyment et al as applied to Claim 1 above, and further in view of Stewart (US 2,512,183).

(d) Claims 6 and 7 under 35 U.S.C. 103(a) as being unpatentable over Probasco in view of Dyment et al. as applied to Claim 1 above, and further in view of Viessmann (US 3,680,736).

Synopses of Cited References

Probasco (US 2,990,084) discloses a vending machine 10 has a housing 62 constituted by a head section 14 and a base section 16. The head section 14 is supported upon the base section 16 at an upper annular flange 56 thereon. The base section 16 defines an interior coin receptacle 18 which receives coins from operation of a coin-operated mechanism 30 that causes dispensing of a selected rectangular commodity 12 from the head section 14 to a dispensing chute 26 mounted in the base section 16. The base section 16 has a bottom 22 upon which is centrally located an upstanding boss 52

with a threaded bore. The head section 14 includes a stationary bed plate 60 with a depending skirt 58, a transparent enclosure 68 and a top cover 74. The machine 10 also includes a dispensing head 64 disposed in a rotatable operative relationship with the bed plate 60, transparent enclosure 68 and top cover 74. A peripheral groove 66 formed in the bed plate 60 supports the lower end of the outer enclosure 68. The enclosure 68 has a flange 70 on its upper end defining a central opening 72 which is closed by the top cover 74 fitted over the upper end of the enclosure 68. For rotatably mounting the dispensing head 64 upon the bed plate 60, there is provided: first, a bearing column 80 at its lower end threadedly engaged in a centrally located upstanding boss 76 on the bed plate 60; second, a pair of upper and lower mounting discs 84, 86 fixedly mounted to walls 102 of vertical channel-shaped receptacles 104 of the dispensing head 64 and having central bores 88, 90 encompassing the periphery of the bearing column 80 such that the discs 84, 86 of the dispensing head 64 are rotatable about the stationary bearing column 80; and, third, the bearing column 80 at its upper end being threaded for reception of a lock nut 94 to maintain the receptacles 104 and upper and lower discs 84, 86 of the dispensing head 64 in a rotatable operative relationship with the bearing column 80. The dispensing head 64 also includes a plurality of tie rods 113 extending between and interconnecting the upper and lower mounting discs 84, 86 for maintaining them in operative relationship with one another. The top cover 74 is maintained upon the enclosure 68 by a vertical tie rod 240 which at its lower end is threadedly engaged in the bore 54 of the boss 52 on the bottom of the base section 16 and at its upper end is engaged by a lock 246 which fits into a central boss (unnumbered) recessed into the top cover 74. The lock 246 and tie rod 240 normally effect clamping of the enclosure 68, the bed plate 80 with skirt 58 of the top section 14, and the bearing column 80 attached upon the bed plate 80, between the top cover 74 and the base section 16 such that all of these components are maintained together in a stationary operative relationship relative to one another and with

the dispensing head 64 rotatable relative to all of them. (A key 250 must be inserted into the lock 246 to permit its rotation and removal from the tie rod 240 and unclamping of a hold-down force on the top cover 74 so that the top section 14 and the dispensing head 64 therewith, due to its rotatable mounting by the bearing column 80 threadedly fixed upon the bed plate 60, can be lifted off the tie rod 240 and the base section 16.) For causing rotation of the dispensing head 64 in order to align a selected receptacle 104 with a dispensing station 132, a plurality of bosses 114 are formed on the upper mounting disc 84 that are engageable by a sprocket wheel 116 mounted for rotation on a drive shaft 118 rotatably mounted by another boss (unnumbered) fixed on and depending from the top cover 74 at a location radially spaced from the central boss which mounts the lock 246. The drive shaft 118 is operable by means of a knob 120 thereon located at the exterior of and above the top cover 74. Thus rotation of the knob 120 (relative to the stationary cover 74) by a user or customer causes concomitant rotation of the sprocket wheel 116 which because of its drive engagement with the bosses 114 on the upper mounting disc 84 will cause rotary movement of the dispensing head 64 relative to all of the other clamped-together stationary components. Therefore, when a user or customer grasps the knob 120, he can rotate the knob 120, relative to the top cover 74, to cause concomitant rotation of the dispensing head 64, relative to the stationary enclosure 68, top cover 74, bearing column 80 and bed plate 60, to bring a selected receptacle 104 containing a desired commodity into a position wherein the lowermost one of a stack of such commodities can be expelled therefrom.

Dyment et al. (US 4,663,943) discloses a refrigerated display apparatus which includes a hollow housing 16 having a transparent outer wall 36 closed at the top by a cover 38 and open at the bottom to define a hollow interior. The apparatus also includes a base support 12&14 mounting the housing 16 and a door 24 mounted over an access opening in the transparent outer wall 36. Articles are stacked in vertical columns within the housing interior upon an

article support carriage 18 which is rotatable with respect to the support base 12&14 and the housing 16 (see Col. 7, lines 34-36) to index each vertical column of articles in direct alignment with a near bottom access opening 102 to permit removal of items from the support carriage 18 and the housing interior 40. The door 24 covering the access opening 102 can be opened to permit removal of the lowermost article in the column.

Grubb, Jr. (US 4,258,966) discloses a rotary storage cabinet having an outer stationary housing and an inner rotatable rotor having four sides positionable to present contents of the cabinet simultaneously to two opposite openings in the housing.

Stewart (US 2,512,183) discloses a vending machine having a circular shelf 82 freely supported on a central vertical shaft 71 by radial and thrust bearings 77, 78. The shelf 82 and shaft 71 are inside a cabinet and accessible through a door 35 in the cabinet.

Viessmann (US 3,680,736) discloses a rotary valve dispenser for tablets having a rotary valve 3 with a tablet receiving recess provided therein.

Arguments For Patentability

None of the prior art references, taken either singly or in any valid combination, disclose, teach or suggest the vending machine as defined in Claims 1-7, 9 and 10. It is readily apparent in view of the brief synopsis of the relevant disclosure of each of the cited patents set forth in the preceding paragraphs that the references individually or in the proposed combinations thereof fail to contemplate the vending machine, as defined in original and amended independent Claim 1, having a coupling subassembly which rotatably mounts a storage magazine, top cover and outer enclosure as a unit for undergoing rotation relative to a top platform and base housing of the vending machine for disposing the selected one of the cavities of the storage magazine over a radial opening in the top platform. By a user manually rotating the outer enclosure the storage magazine, via the interconnection provided by the top

cover, also is rotated so that a selected one of its cavities is placed over the radial opening in the top platform so that the desired items in a small package can be dispensed therethrough.

In contrast to the above-paraphrased features of the invention defined in original and amended independent Claim, the primary reference to Probasco merely discloses a vending machine 10 which includes a dispensing head 64 (comparable to Applicant's storage magazine) disposed in a rotatable operative relationship with a bed plate 60 (comparable to Applicant's top platform), a transparent enclosure 68 (comparable to Applicant's outer enclosure) and a top cover 74 (comparable to Applicant's top cover). The dispensing head 64 is rotatably mounted upon the bed plate 60 by a bearing column 80 being fixedly threaded at its lower end into a boss 76 on the bed plate 60 and a pair of upper and lower mounting discs 84, 86 fixedly part of the dispensing head 64 which encompass and are rotatable relative to the bearing column 80. The top cover 74 is maintained stationarily upon the enclosure 68 by a vertical tie rod 240 which at its lower end is threadedly engaged in a boss 52 on the bottom of a base section 16 (comparable to Applicant's base housing) and at its upper end is engaged by a lock 246 which fits into a central boss (unnumbered) recessed into the top cover 74. The lock 246 and tie rod 240 normally effect clamping of the enclosure 68, the bed plate 60 (with a skirt 58) and the bearing column 80 fixedly attached upon the bed plate 60, between the top cover 74 and the base section 16 such that all of these components are maintained together in a stationary operative assembled relationship relative to one another, which supports the dispensing head 64 in a rotatable relationship relative to all of them. For causing rotation of the dispensing head 64 in order to align a selected receptacle 104 thereof with a dispensing station 132, a user or customer must grasp a knob 120 of a shaft 118 rotatably mounted through the top cover 74 and rotate the knob 120 relative to the top cover 74 so to cause concomitant rotation of the dispensing head 64 (via a sprocket wheel 116 on the shaft 118 being drivingly engaged with bosses 114 on an upper mounting disc 84 of

the dispensing head 64) relative to the enclosure 68, top cover 74, bed plate 60 and bearing column 80, to bring a selected receptacle 104 into a position wherein the lowermost one of a stack of such commodities can be expelled therefrom. The primary reference to Probasco thus fails to disclose or teach a coupling subassembly rotatably mounting a storage magazine, a top cover and an outer enclosure as a unit for undergoing rotation relative to a top platform and a base housing, to dispose a selected one of the cavities of the storage magazine over a radial opening in the top platform, by a user manually rotating the outer enclosure, as defined in original and amended independent Claim 1. Instead, in Probasco only the dispensing head 64 is rotatably mounted upon the bed plate 60 via the bearing column 80 being fixedly threaded on the bed plate 60 and rotatably mounting the upper and lower mounting discs of the dispensing head 64. The enclosure 68 and top cover 74 are not rotatable with the dispensing head 64 but instead are part of the components which are clamped together and held in a stationary rigid assembled relationship with one another, by the tie rod, lock and base section. To modify the primary reference so as to be able rotate the top cover 74 and enclosure 68 with the dispensing head 64 would render the machine of the primary reference inoperable for its intended mode of operation in view that it depends upon the tie rod and lock imposing a hold-down force on the top cover to clamp the enclosure, bed plate (with its skirt) between the top cover and base section so that a rigid stationary structure be provided upon which the dispensing head 64 can rotate.

On page 3 (last line) of the Office Action the Examiner has mischaracterized the outer enclosure 68 of the primary reference by stating that it is "adapted to be manually rotated by a user" citing column 5, lines 35-40 of the patent. Instead, the cited portion of the primary reference describes a knob 120 secured to a drive shaft 118 and a sprocket wheel 116 on the drive shaft 118 such that rotation of the knob 120 causes rotation of the sprocket wheel and thereby rotary movement of the dispensing head 64. Also

on page 4 of the Office Action the Examiner has mischaracterized the top cover 74 of the primary reference by stating that the "top cover (74) will rotate with said outer enclosure when said outer enclosure is manually rotated by a user". As stated above, when the machine of the primary reference is in its operative condition, the top cover and outer enclosure are (and must be) clamped to the bed plate and base section by the action of the tie rod and lock. Thus, contrary to what the Examiner asserts in the second paragraph on page 4 of the Office Action, there is no comparable coupling assembly in the primary reference which couples and rotatably mounts the storage magazine, top cover and outer enclosure as a unit for undergoing rotation relative to the top platform and base housing.

Also, it is readily apparent from the above synopses of the secondary references to Dyment et al., Grubb, Jr., Stewart and Viessmann that they fail to fill in the above-mentioned gaps in the teachings of Probasco. It should be pointed out here that the Examiner stated on page 5 of the Office Action that Probasco does not teach a top cover to rotate with the outer enclosure, as the enclosure is rotated. This is not an accurate characterization of the capabilities of the top cover and outer enclosure of the primary reference. In the primary reference, neither the top cover nor the enclosure rotate. The only component that rotates is the dispensing head. Also, the Examiner is mistaken in asserting that the secondary reference to Dyment et al. teaches a vending machine wherein a cover (38) mounted to a enclosure (36) "are rotated together in unison when a user rotates the article support carriage (18)." In Col. 7, lines 34-36, this secondary reference states that the "article support carriage 18 and, in turn, the vertical columns 22 of articles 20, are rotatable with respect to the fixed column support 12 and housing 16." The outer wall 36 is part of the housing 12 so it does not rotate with the carriage 18 nor does the cover 38. Also, contrary to the Examiner assertion set forth in the third paragraph on page 5 of the Office Action that it would be obvious to modify the primary reference to rotate its enclosure

and cover in view that such would reduce the complexity of attaching the cover to the outer enclosure, it is respectfully submitted that to so modify the vending machine of the primary reference would render it inoperable for its intended mode of operation for reasons given above. It is submitted that one of ordinary skill in the art would not be motivated by any of these secondary references or for the reason asserted by the Examiner to modify Probasco so as to replicate the relationships as defined in Applicant's original and amended independent Claim 1 for to do so would render the vending machine of the primary reference inoperative for its intended mode of operation.

Conclusion

It is submitted that in light of the above-mentioned differences, a case of prima facie obviousness against the invention as defined in Claims 1-7, 9 and 10 has not been presented based on the references cited in the rejections by the Examiner. The combinations set forth in the claims are too many steps removed from the teachings of the cited references to be considered as anticipated by or obvious in view thereof.

In view of the foregoing amendments and remarks, Claims 1-7, 9 and 10, along with allowable Claims 8 and 11-14, are considered to satisfy the requirements of Section 112, to distinguish over the prior art of record under Sections 102 and 103, and thereby to be patentable. Thus, favorable consideration and allowance of the subject application are respectfully solicited.

Respectfully submitted,


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